

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An unlicensed-radio access network connected to a core network portion of a licensed mobile network, said unlicensed-radio access network comprising:
 - an access controller connected to said core network portion,
 - a broadband network connected to said access controller and comprising a plurality of access points, each said access point defining a mini-cell coverage area and supporting an unlicensed-radio interface permitting communication between mobile stations located within a respective mini-cell and said access controller,
 - wherein said access controller:
 - is adapted to communicate directly with mobile stations located in a mini-cell;
 - is assigned at least one location area in said licensed radio mobile network, said location area being separate and unique to said unlicensed radio access network;
 - comprises a database for storing an identification of a mobile station in association with a network address for said mobile station on said broadband network, wherein said network address is unique to said mobile station so as to enable said access controller to page said mobile station for voice calls individually, said access controller being adapted to delete said identification data when said mobile station ceases to operate in the coverage areas of said unlicensed radio access network; and
 - is adapted to receive from said core network portion a paging

message containing the identification of a mobile station located in the assigned location area, to identify the network address associated with said identified mobile station, and to transmit said paging message to said identified network address only.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) ~~An~~The access network as claim 1, wherein said access ~~network~~ controller is adapted to receive from a mobile station a message registering identification data for said mobile station and to store said ~~new~~ identification data in said database in association with address information for said mobile station on said broadband network.

5. (Currently Amended) ~~An~~The access network as claimed in claim 1, wherein said mobile station identification data is the international mobile subscriber identity (IMSI).

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) ~~An~~The access network as claimed in claim 1, wherein said access network controller is adapted to determine whether a connection with said mobile station is maintained and to delete said identification data on determining that said connection is no longer maintained.

- 10. (Cancelled)
- 11. (Cancelled)
- 12. (Cancelled)
- 13. (Cancelled)

14. (Currently Amended) A method in an access controller of an unlicensed-radio access network , wherein said access controller is connected to a broadband network comprising a plurality of access points and to a core network portion of a licensed-radio cellular network and being adapted to communicate with mobile stations over an unlicensed-radio interface via said access points, said method comprising:

establishing communication with a mobile station using a network address on said broadband network for said mobile station,

receiving identification information specific to a mobile station from said mobile station,

registering said mobile station identification information in association with said mobile station network address on said broadband network,

wherein said network address is unique to said mobile station so as to enable said access controller to page said mobile station for voice calls individually,

determining when a connection established with said mobile station is no longer maintained and deleting said mobile station identification information when it is determined that a connection is no longer maintained;

receiving a message from said core network portion paging a mobile station,

retrieving mobile station identification information registered for said paged mobile, and

forwarding said paging message only to the network address identified in association with said registered mobile station identification information.

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Currently Amended) ~~An~~The access network as claimed in claim 1, wherein the broadband network is a fixed broadband network.

19. (Currently Amended) ~~A~~The method as claimed in claim 14, wherein the broadband network is a fixed broadband network

20. (Currently Amended) An access controller of an unlicensed-radio access network, said access controller being connected to a core network portion of a licensed mobile network and to a broadband network having a plurality of access points, each said access point defining a mini-cell coverage area and supporting an unlicensed-radio interface permitting communication between mobile stations located within a respective mini-cell and said access controller, wherein said access controller:

is adapted to communicate directly with mobile stations located in a mini-cell;

is assigned at least one location area in said licensed radio mobile network, said location area being separate and unique to said unlicensed radio access network;

comprises a database for storing an identification of a mobile station in association with a network address for said mobile station on said broadband network, said network address being unique to said mobile station such as to enable said access controller to page said mobile station for voice calls individually, said access controller being adapted to delete said identification data when said mobile station ceases to operate in the coverage areas of said unlicensed radio access network; and

is adapted to receive from said core network portion a paging message comprised by the identification of a mobile station located in the associated location area, to identify

the network address associated with said identified mobile station, and to transmit said paging message to said identified network address only.

21. (Cancelled)

22. (Currently Amended) ~~An~~The access controller as claimed in claim 20, wherein said mobile station identification data is the international mobile subscriber identity (IMSI).

23. (Currently Amended) ~~An~~The access controller as claimed in claim 20, wherein said access network controller is adapted to determine whether a connection with said mobile station is maintained and to delete said identification data on determining that said connection is no longer maintained.